

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2021/0347783 A1 CHOI et al.

Nov. 11, 2021 (43) **Pub. Date:**

(54) NOVEL DERIVATIVE OF BETA-APOPICROPODOPHYLLIN AND METHOD OF PREPARING THEREOF

(71) Applicant: J&C Sciences, Daejeon (KR)

(72) Inventors: Jong-Ryoo CHOI, Daejeon (KR); In-Young CHOI, Daejeon (KR); So-Yeon NAM, Daejeon (KR); Se Hee HYUN, Daejeon (KR)

(21) Appl. No.: 16/991,190

(22)Filed: Aug. 12, 2020

(30)Foreign Application Priority Data

May 11, 2020 (KR) 10-2020-0055887

Publication Classification

(51) Int. Cl. C07D 493/04 (2006.01)

(52) U.S. Cl.

(57)ABSTRACT

Provided are a novel derivative of β-apopicropodophyllin and a method of preparing the same, and more particularly, a compound represented by Formula 1 below, which is a novel derivative of β-apopicropodophyllin derived from podophyllotoxin, which is an anticancer agent, a method of preparing the same, and a composition for treating cancer, which includes the compound.

In Formula 1, R is a C_2 to C_{10} alkyl group, a C_2 to C_{10} alkyl group containing an allyl- or alkyne, a — $[CH_2]_n$ — C_3 to C_8 cycloalkyl group, a substituted or unsubstituted —[CH₂]_nphenyl group, a substituted or unsubstituted $-[CH_2]_n$ - C_2 to C_6 heteroaromatic group, a $-C(=O)-C_1$ to C_8 alkyl group, a substituted or unsubstituted —C(=O)—[CH₂]_nphenyl group, or a substituted or unsubstituted —C(=O)— $[CH_2]_n$ — C_5 to C_6 heteroaromatic group, wherein n is an integer of 0 to 6.